

Recombinant Rat Interleukin-2, Liquid (rRtIL-2, Liquid)

PrimeGene Technical Data Sheet

Catalog Number:	141-02L
Source:	<i>Escherichia coli</i> .
Molecular Weight:	Approximately 15.5 kDa, a single non-glycosylated polypeptide chain containing 135 amino acids.
Quantity:	5µg/20µg/1000µg
AA Sequence:	APTSSPAKET QQHLEQLLLD LQVLLRGIDN YKNLKLPMML TFKFYLPKQA TELKHLQCLE NELGALQRVL DLTQSKSFHL EDAGNFISNI RVTVVKLGKS ENKFECQFDD EPATVVEFLR RWIAICQSII STMTQ
Purity:	> 97 % by SDS-PAGE and HPLC analyses.
Biological Activity:	Fully biologically active when compared to standard. The ED ₅₀ as determined by a cell proliferation assay using murine CTLL-2 cells is less than 0.2 ng/ml, corresponding to a specific activity of > 5.0 × 10 ⁶ IU/mg.
Physical Appearance:	Sterile Colorless liquid.
Formulation:	A 0.2 µm filtered concentrated sterile solution in 10 mM sodium citrate, pH 4.0, 30 % glycerol.
Endotoxin:	Less than 1 EU/µg of rRtIL-2, Liquid as determined by LAL method.
Stability & Storage:	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none">● 6 months from date of receipt, -20 to -70 °C as supplied.● 3 months, -20 to -70 °C under sterile conditions after opening.
Usage:	This material is offered by Shanghai PrimeGene Bio-Tech for research, laboratory or further evaluation purposes. NOT FOR HUMAN USE.

Rat Interleukin-2

IL-2 is a powerful immunoregulatory lymphokine produced by T-cells in response to antigenic or mitogenic stimulation. It is expressed by CD4+ and CD8+ T cells, γδ T cells, B cells, dendritic cells, and eosinophils. IL-2/IL-2R signaling is required for T-cell proliferation and other fundamental functions which are essential for the immune response. The receptor for IL-2 consists of three subunits (55 kDa IL2Rα, 75 kDa IL2Rβ, 64 kDa common gamma chain γc/IL2Rγ) that are present on the cell surface in varying preformed complexes. Recombinant rat IL-2 is a 15.3 kDa protein containing 134 amino acid residues and it shares about 82 %, 66 %, 66 %, 60 % and 54 % amino acid sequence identity with mouse, human, rhesus macaque, pig and equus caballus IL-2, respectively.